**Application No.:** 10/603,037

Office Action Dated: November 18, 2005

This listing of claims will replace all prior versions, and listings, of claims in the application.

## **Listing of Claims:**

1. (Currently Amended) A method for improving data processing in connection with a database, said method comprising:

defining a dimension comprising a plurality of attributes;

assigning each attribute to a respective column of said database; and

defining relationships between said attributes, wherein said relationships are not subject to restrictions placed on said database.

2. (Original) A method in accordance with claim 1, further comprising: accessing said database via said dimension.

- (Original) A method in accordance with claim 1, further comprising:
  defining at least one hierarchy comprising a sequence of said attributes.
- 4. (Original) A method in accordance with claim 3, wherein each hierarchy defines a drill down path for accessing said database.
- 5. (Original) A method in accordance with claim 3, wherein a hierarchy contains one attribute.
- 6. (Original) A method in accordance with claim 3, wherein said act of defining said at least one hierarchy is independent of said database.
- 7. (Canceled)
- 8. (Original) A method in accordance with claim 1, wherein said database is a relational database.
- 9. (Original) A method in accordance with claim 1, wherein said dimension is utilized with an on line analysis processing (OLAP) system.

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10. (Original) An application programming interface (API) comprising means for performing the method of claim 1.

11. (Currently Amended) A computer-readable medium having computer-executable instructions for improving data processing in connection with a database by performing acts comprising:

defining a dimension comprising a plurality of attributes;

assigning each attribute to a respective column of said database; and

defining relationships between said attributes, wherein said relationships are not subject to restrictions placed on said database.

- 12. (Original) A computer-readable medium in accordance with claim 11, further having computer-executable instructions for accessing said database via said dimension.
- 13. (Original) A computer-readable medium in accordance with claim 11, further having computer-executable instructions for defining at least one hierarchy comprising a sequence of attributes.
- 14. (Original) A computer-readable medium in accordance with claim 13, wherein each hierarchy defines a drill down path for accessing said database.
- 15. (Original) A computer-readable medium in accordance with claim 13, wherein a hierarchy contains one attribute.
- 16. (Original) A computer-readable medium in accordance with claim 13, wherein said act of defining said at least one hierarchy is independent of said database.
- 17. (Canceled)
- 18. (Original) A computer-readable medium in accordance with claim 11, wherein said database is a relational database.
- 19. (Original) A computer-readable medium in accordance with claim 11, wherein said dimension is utilized with an on line analysis processing (OLAP) system.

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20. (Currently Amended) A system for accessing a database, said system comprising:

a processor coupled to a storage device, said storage device comprising said database;

a first definition component for defining a dimension comprising a plurality of

attributes;

an assignment component for assigning each attribute to a respective column of said

database;

a second definition component for defining relationships between said attributes.

wherein said relationships are not subject to restrictions placed on said database; and

an access component for allowing access to said database via said dimension.

21. (Original) A system in accordance with claim 20, further comprising:

a third definition component for defining at least one hierarchy within each

dimension, each hierarchy comprising a sequence of attributes.

22. (Original) A system in accordance with claim 21, wherein each hierarchy defines a

drill down path for said access component.

23. (Original) A system in accordance with claim 21, wherein a hierarchy contains one

attribute.

24. (Original) A system in accordance with claim 21, wherein said third definition

component defines said at least one hierarchy independent of said database.

25. (Canceled)

26. (Original) A system in accordance with claim 20, wherein said system is utilized with

an on line analysis processing (OLAP) system.

27. (Currently Amended) A system for accessing a database, said system comprising:

means for defining a dimension comprising a plurality of attributes;

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means for assigning each attribute to a respective column of said database;

means for defining relationships between said attributes, wherein said relationships are not subject to restrictions placed on said database;

means for accessing said database via said dimension; and

means for defining at least one hierarchy comprising a sequence of said attributes.

28. (Canceled)

29. (Original) A system in accordance with claim 27, wherein said at least one hierarchy is defined independent of said database.

- 30. (Original) A system in accordance with claim 27, wherein said system is an on line analysis processing (OLAP) system.
- 31. (Original) A system in accordance with claim 27, wherein said means for defining a dimension, means for assigning, means for defining relationships, means for accessing and means for defining at least one hierarchy comprise at least one application programming interface (API).
- 32. (Currently Amended) A data structure embodied by at least one computer readable medium, comprising:
  - a dimension comprising a plurality of attributes, wherein each attribute is bound to a column in a database; and
  - a logical structure indicative of relationships between said plurality of attributes, wherein said relationships are not subject to restrictions placed on said database.
- 33. (Original) A data structure in accordance with claim 32, said data structure further comprising at least one hierarchy comprising a sequence of attributes.
- 34. (Original) A data structure in accordance with claim 33, wherein each hierarchy provides a drill down path for accessing said database.

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35. (Original) A data structure in accordance with claim 33, wherein a hierarchy contains a single attribute.

- 36. (Original) A data structure in accordance with claim 33, wherein each sequence is defined independent of restrictions associated with said database.
- 37. (Original) A data structure in accordance with claim 32, wherein said logical structure is defined independent of restrictions associated with said database.
- 38. (Original) A data structure in accordance with claim 32, wherein said database is a relational database.
- 39. (Original) A data structure in accordance with claim 32, wherein said database is capable of being utilized with an online analytical processing (OLAP) system.
- 40. (Currently Amended) A method for retrieving data from a database, said method comprising:

receiving a data retrieval request including a dimension, wherein:

said dimension includes a plurality of attributes;

each attribute is assigned to a respective column of said database; and relationships between said attributes are defined, wherein said relationships are not subject to restrictions placed on said database; and

retrieving said data from said database via said dimension.

- 41. (Original) A method in accordance with claim 40, further comprising: providing said retrieved data in response to said data retrieval request.
- 42. (Original) A method in accordance with claim 40, said data retrieval request further including at least hierarchy comprising a sequence of said attributes.
- 43. (Original) A method in accordance with claim 42, wherein each hierarchy provides a drill down path for accessing said database.

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44. (Original) A method in accordance with claim 42, wherein a hierarchy contains a single attribute.

- 45. (Original) A method in accordance with claim 42, wherein each sequence is defined independent of restrictions associated with said database.
- 46. (Original) A method in accordance with claim 40, wherein said relationships between said attributes are defined independent of restrictions associated with said database.
- 47. (Original) A method in accordance with claim 40, wherein said database is a relational database.
- 48. (Original) A method in accordance with claim 40, wherein said database is capable of being utilized with an online analytical processing (OLAP) system.